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# United States Department of Agriculture.

## BUREAU OF ANIMAL INDUSTRY—CIRCULAR NO. 42.

D. E. SALMON, D. V. M., Chief of Bureau.

WASHINGTON, D. C., October 1, 1903.

SIR: The demand for information concerning goats appears to be increasing. The literature published by the Bureau on the Angora goat answers quite fully all inquiries about that breed, but heretofore we have been unable to supply the demand for publications on the common goat of the United States. The editor of this Bureau, who has immediate charge of the correspondence concerning the goat industry, has prepared the accompanying manuscript on the subject of the common goat with the purpose in view of supplying the needs for information on that subject, and I have the honor, therefore, to recommend that it be published as a circular of this Bureau.

Respectfully,

D. E. SALMON, *Chief of Bureau.*

Approved.

JAMES WILSON,  
*Secretary of Agriculture.*

## INFORMATION CONCERNING COMMON GOATS.

### THE PURPOSE OF THIS CIRCULAR.

For several years numerous inquiries have been coming to the Bureau of Animal Industry as to the possibilities of raising goats for their skins. These inquiries are principally from those who have capital for investment or who have large tracts of unproductive land. When these people become aware of the fact that we send abroad \$25,000,000 annually for goatskins, and that the natural conditions here are favorable for raising the goats which produce such skins as we import, they become interested. The press has encouraged the development of a domestic industry in the production of goatskins, oftentimes in ignorance of the conditions that obtain here and of those conditions requisite for success. It is in order to reply to these inquiries fully and accurately that this circular is prepared.

### MEANING OF THE TERM "COMMON GOATS."

It is not intended by the use of the term "common goats" to convey the impression that they are a distinctive breed. On the contrary,

it is generally accepted as including all sorts of mongrel goats, whatever their size, conformation, color, or character of hair. They are usually referred to as "common" in order to distinguish them from the Angora goats, which are a specific breed.

#### NUMBER AND VALUE OF GOATS.

The table given herewith is compiled from the census returns and shows the number of goats, of all kinds, for the year 1900. Besides the exhibit in the table there were 78,353 goats reported for cities and villages, making the grand total of 1,949,605 for the whole country.

It is a matter to be regretted that the census returns made no distinction between common goats and Angoras. A free estimate is that about 700,000 of the total are of the Angora breed. The rest are all sorts of animals except recognized breeds of milch goats, of which there are so few as not to affect the total materially.

So little is generally known about the common goat in this country and it has heretofore been so little in evidence in public print that no little surprise was expressed when the census returns showed an enumeration of about 2,000,000. Indeed there are some who are inclined to doubt the accuracy of the census count. The writer, however, knows of no other way to form an estimate.

*Number and value of goats, all breeds, on farms in the United States, by States and Territories, in 1900.*

State or Territory.	Number of farms reporting.	Number.	Value.
Alabama .....	8,633	117,413	\$94,258
Arizona .....	436	98,403	167,863
Arkansas .....	4,571	51,839	58,788
California .....	1,579	109,021	262,981
Colorado .....	620	37,433	73,141
Connecticut .....	73	313	1,945
Delaware .....	43	143	519
District of Columbia .....	6	9	39
Florida .....	2,154	43,705	32,639
Georgia .....	6,716	84,624	61,972
Hawaii .....	19	653	731
Idaho .....	68	4,481	20,167
Illinois .....	1,642	8,877	19,932
Indiana .....	1,518	4,484	8,920
Indian Territory .....	733	10,529	21,538
Iowa .....	3,007	41,468	146,708
Kansas .....	995	18,288	71,290
Kentucky .....	2,144	11,967	19,753
Louisiana .....	2,723	38,308	35,697
Maine .....	70	279	1,091
Maryland .....	227	1,179	4,023
Massachusetts .....	145	1,254	7,188
Michigan .....	537	2,861	10,008
Minnesota .....	498	3,821	12,908

*Number and value of goats, all breeds, on farms in the United States, by States and Territories, in 1900—Continued.*

State or Territory.	Number of farms reporting.	Number.	Value.
Mississippi.....	5,431	55,388	\$45,594
Missouri.....	2,754	24,487	64,786
Montana.....	61	1,713	7,870
Nebraska.....	488	2,399	9,126
Nevada.....	39	4,633	12,948
New Hampshire.....	61	208	916
New Jersey.....	200	699	3,006
New Mexico.....	2,874	224,136	472,961
New York.....	576	1,316	6,442
North Carolina.....	5,089	42,901	37,997
North Dakota.....	142	1,122	5,308
Ohio.....	1,025	5,432	16,975
Oklahoma.....	277	3,772	10,854
Oregon.....	2,178	109,661	375,229
Pennsylvania.....	763	2,197	8,951
Rhode Island.....	16	23	131
South Carolina.....	3,643	26,576	24,450
South Dakota.....	252	2,915	15,050
Tennessee.....	3,663	25,884	38,938
Texas.....	6,742	627,333	923,777
Utah.....	93	1,427	2,702
Vermont.....	41	102	444
Virginia.....	1,004	5,305	10,002
Washington.....	165	2,876	10,757
West Virginia.....	219	847	2,123
Wisconsin.....	534	3,882	12,760
Wyoming.....	47	2,666	11,884
Total.....	77,534	1,871,252	3,266,080

CONCERNING THE SUPPLY OF GOATS.

One of the principal inquiries made of the Bureau of Animal Industry is "Where can common goats be purchased?" This is a question we have been unable to answer except in a general and somewhat unsatisfactory way. It is known that in Texas, New Mexico, and Arizona there are considerable numbers of the long-haired variety, but it has been pointed out elsewhere that these are not suitable for the production of skins; and there are several good reasons why they are not suitable in any degree as foundation stock for a flock of Angoras.

While the census returns show a considerable number of goats of all breeds in most of the Southern States, they are extensively dispersed upon the farms. For instance, the 117,413 goats shown for Alabama were reported from 8,633 farms; the 84,624 in Georgia were on 6,716 farms, and so on at a similar ratio for the other States. In considering these figures we must not overlook the fact that in some of

the States there are large numbers of the Angora breed. This is especially true of Texas, New Mexico, Arizona, California, and Oregon.

The common goats are found principally on the farms of the South which are tenanted by colored people and the poorer classes of whites, and for some of these the goats furnish about the only meat supply. The prices demanded are very low, but a few only could be found on one farm, and there would therefore be some difficulty in bringing any considerable number together at small cost.

#### KIND OF SKINS IN DEMAND.

Not all kinds of goatskins are in demand for leather. The skin of the Angora, for instance, is not at all suitable for shoe leather or for kid gloves, although tanners make of it morocco leather, and it is used to considerable extent in the manufacture of workmen's gloves. A prominent Philadelphia dealer in goatskins says: "The pelt of the Angora, whether it be from Turkey or elsewhere, is, as a rule, too thin and poor for leather, as it is a fact that the longer the hair of the goat the thinner and poorer the pelt." This being true, not only are Angoras put out of consideration, but also all goats having long hair. This eliminates a very large number of the goats of the United States, as no doubt our common goats are principally of the long-haired Mexican variety. One who contemplates raising goats for their skins should, therefore, not consider the Angora or any other long-haired variety.

Not all of the imported skins are suitable for shoe leather, but the tanner carefully sorts each bale and throws out all that have long hair, as that is conclusive evidence of inferiority.

Among the French mountaineers the raising of kids for their skins is a leading industry. Softness, delicacy of texture, and freedom from blemish are principal factors in the value of kid skins, and to secure these essentials great pains are taken. So soon as the kids are old enough to eat grass or other vegetation the skin declines in quality, as with such diet the skin begins to grow coarser and harder in texture, and thus its chief merit disappears. The kid is therefore carefully penned, not only to prevent it from eating grass, but also to secure the skin from accidental injury from scratches and bruises, which necessarily impair its value. When the kids have reached a certain age, at which the skins are in the best condition for the use of the glover, they are killed and the hides are sold to traveling hawkers, through whom they reach the great centers of the tanning industry. The conditions in the United States, especially as regards the item of labor, are so unlike those of mountainous France that it is not at all probable that a similar industry could be maintained here.

## IMPORTS OF GOATSKINS.

The table herewith, which shows the quantity and value of importations of goatskins for the fiscal years ended June 30, 1898, to 1902, is compiled from "Commerce and Navigation" of the Bureau of Statistics of the Treasury Department. The volume for 1903 is not yet available, but "The Monthly Summary of Commerce and Finance" for 1903, which is also published by the Bureau of Statistics of the Treasury Department, shows that the total weight of imported goatskins was 84,821,594 pounds, valued at \$24,928,729. It is safe to assume that these skins came from the same countries that sent skins during previous years. These figures do not equal those of 1902 by 3,216,922 pounds and \$549,450. It will be observed, however, that the general trend of imports has been upward, from about \$16,000,000 in 1898 to \$25,000,000 in 1903.

The British East Indies send us more goatskins than any other country, the value for 1902 being \$7,577,616; then for the same year, in the order named, come France (\$2,611,880), Mexico (\$2,081,697), Chinese Empire (\$1,823,273), Russia on the Baltic and White seas (\$1,532,740), Brazil (\$1,495,358), United Kingdom (\$1,138,646), Aden (\$1,094,367), Argentina (\$1,055,040), and so on.

The values of these goatskins are those at ports of export. The average value per pound for the several years shown in the table is as follows:

	Cents.
1898.....	24.3
1899.....	26.5
1900.....	26.8
1901.....	27.9
1902.....	28.9

*Imports of goatskins for fiscal years of 1898 to 1902, and countries of export.*

Country of export.	1898.		1899.		1900.		1901.		1902.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
<b>EUROPE.</b>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
Austria-Hungary .....	1,340,898	329,906	956,656	271,379	1,322,840	367,221	1,211,241	329,245	1,313,191	399,916
Azores, and Madeira Islands.....	18,600	4,490			14,161	4,177				
Belgium .....	43,811	10,165	156,556	52,449	101,856	35,294	156,268	47,977	157,592	36,720
Denmark .....			20,190	2,979	96,495	22,232	450	107	95	20
France .....	8,685,397	2,164,570	7,894,102	2,268,146	9,568,071	2,809,291	8,866,780	2,608,751	8,813,030	2,611,883
Germany.....	2,283,384	691,064	2,860,288	926,734	2,257,614	713,807	3,181,697	908,948	2,621,322	752,850
Gibraltar.....			5,980	1,532						
Greece .....					34,986	9,549	22,086	5,162	20,270	4,065
Italy .....	795,028	177,908	726,515	169,224	510,341	133,550	627,944	164,752	474,934	147,498
Malta, Gozo, etc .....	37,527	11,659	33,531	8,023	35,688	8,440	43,009	11,402	49,393	13,040
Netherlands .....	414,753	152,954	335,701	137,763	466,104	235,931	405,852	230,708	462,751	265,268
Portugal .....	100,342	30,949	168,397	57,569	152,595	59,838	490,401	197,012	377,608	181,161
Russia on Baltic and White Seas.....	5,743,751	1,113,030	5,067,576	942,227	5,908,613	1,269,498	5,271,530	1,066,824	6,646,663	1,532,740
Russia on Black Sea.....	238,533	49,915	115,203	21,451	37,254	12,459	21,342	3,313	288,315	54,162
Servia.....	56,184	12,095					13,965	6,121	43,714	19,642
Spain .....	650,141	196,153	415,356	189,898	826,038	352,461	528,807	214,889	459,257	203,946
Sweden and Norway.....	26,164	8,467	27,761	8,725	61,446	16,511	71,786	30,310		
Switzerland.....	17,666	5,743	46,287	13,340	21,684	6,340	42,943	10,338	12,790	3,783
Turkey in Europe.....	1,879,315	457,304	1,695,921	367,103	2,247,562	413,843	2,464,712	503,648	2,455,768	621,556
United Kingdom.....	4,877,477	971,682	5,738,755	1,123,073	6,641,601	1,428,855	4,859,936	1,034,448	5,164,126	1,138,648
<b>NORTH AMERICA.</b>										
<b>Dominion of Canada:</b>										
Nova Scotia, New Brunswick, etc .....			24	10			1,430	189	790	315
Quebec, Ontario, Manitoba, etc.....	34,672	6,223	154,330	30,660	30,100	10,102	108,060	20,885	39,824	9,134
British Columbia.....			1,372	96					7	5
Newfoundland and Labrador.....									948	140

## Central American States:

Costa Rica .....	148	67	342	86	27,588	12,614	41	6	.....	.....
Guatemala .....	1,176	217	21,363	6,473	13,687	3,315	539	172	13,345	2,262
Honduras .....	.....	.....	.....	.....	36,847	12,362	6,483	2,017	.....	.....
Nicaragua .....	1,420	350	2,884	721	.....	.....	.....	.....	.....	.....
Mexico .....	3,857,677	1,021,200	4,261,679	1,198,066	4,352,127	1,409,054	4,882,418	1,625,157	6,179,804	2,081,697
West Indies:										
British .....	72,147	16,460	77,439	17,985	82,581	23,373	76,207	23,354	115,643	42,415
Cuba .....	295	86	.....	.....	.....	.....	468	72	.....	.....
Danish .....	5,489	1,470	4,863	1,349	4,876	1,065	5,489	1,142	5,542	1,360
Dutch .....	134,671	35,178	150,792	37,951	392,390	115,185	412,421	113,109	328,603	92,674
French .....	67,215	11,821	7,572	1,939	.....	.....	.....	.....	200	60
Haiti .....	127,361	37,271	224,495	74,088	314,839	116,986	227,947	79,108	225,822	70,266
Santo Domingo .....	100,669	29,292	122,805	32,813	113,953	40,508	117,219	43,359	226,655	65,913
Porto Rico .....	.....	.....	.....	.....	583	114	.....	.....	.....	.....

## SOUTH AMERICA.

Argentina .....	2,413,550	738,762	2,881,853	824,509	3,385,666	852,322	2,341,447	750,024	2,969,061	1,055,040
Brazil .....	3,643,916	1,563,346	4,386,337	2,177,960	2,400,742	1,234,018	2,751,204	1,530,420	2,554,092	1,495,358
Chile .....	84,381	17,835	141,751	21,900	211,245	50,053	257,603	59,876	166,069	40,685
Colombia .....	358,635	83,907	386,522	85,151	168,554	45,597	135,174	37,632	197,917	45,542
Ecuador .....	31,426	8,133	46,617	7,849	91,613	25,355	9,890	2,168	31,728	9,536
Guiana:										
British .....	.....	.....	1,350	350	.....	.....	.....	.....	.....	.....
Dutch .....	.....	.....	5,309	1,524	5,151	1,260	.....	.....	.....	.....
French .....	.....	.....	18,626	3,084	.....	.....	.....	.....	.....	.....
Peru .....	613,078	144,615	750,963	192,861	578,219	167,351	659,171	191,762	760,833	228,592
Uruguay .....	.....	.....	.....	.....	.....	.....	53,035	19,060	.....	.....
Venezuela .....	1,399,897	391,326	1,699,711	482,584	1,565,879	476,618	1,675,412	501,952	1,339,576	412,275

## ASIA.

Aden .....	4,243,869	927,438	4,614,444	1,178,528	3,004,090	920,721	3,029,894	909,426	3,336,843	1,094,367
Chinese Empire .....	4,070,737	714,668	4,324,606	868,336	5,014,173	1,186,753	3,351,987	706,238	7,619,062	1,823,273
East Indies:										
British .....	10,194,690	2,526,749	13,075,029	3,386,554	22,277,999	5,598,937	20,801,114	5,474,103	27,271,644	7,577,616
Dutch .....	165,371	49,632	261,575	88,467	538,171	289,426	449,479	202,357	338,042	182,490
French .....	.....	.....	.....	.....	.....	.....	.....	.....	8,600	3,019



*Imports of goatskins for fiscal years of 1898 to 1902, and countries of export.—Continued.*

Country of export.	1898.		1899.		1900.		1901.		1902.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
ASIA—continued.	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
Japan.....					870	124	34,181	7,982	56,181	13,917
Russia, Asiatic.....									34,888	8,405
Turkey in Asia.....	321,897	46,597	193,543	41,863	506,680	86,323	221,333	50,798	423,373	99,280
All other Asia.....			39,290	11,446	84,856	21,644	349,245	96,392	577,093	170,383
OCEANIA.										
British Australasia.....	290	45	38,530	12,049	203,947	64,704	295	94	2,788	768
Hawaiian Islands.....	13,100	2,891	11,556	2,906	7,841	1,578				
AFRICA.										
British Africa:										
South.....	713,800	96,908	594,608	102,288	621,231	111,005	514,819	90,532	629,684	100,927
East.....							247,014	51,223	143,137	31,753
French Africa.....	2,114,592	427,536	2,548,147	521,451	1,925,159	471,326	1,312,368	303,887	1,362,347	337,019
Portuguese Africa.....	64,958	14,995	40,727	11,017	68,008	14,521	5,050	806	51,188	17,000
Spanish Africa.....					3,540	750	28,002	5,387	19,657	3,778
Turkey in Africa:										
Egypt.....	129,718	25,785	173,162	50,444	361,797	87,021	193,612	49,059	84,107	22,557
Tripoli.....					117,983	24,531	8,391	1,731	44,263	11,569
Canary Islands.....							9,917	1,817		
All other Africa.....	2,733,671	474,744	2,199,942	451,361	3,148,884	661,761	1,186,488	249,782	1,518,341	339,891
Total.....	64,923,487	15,776,601	69,728,945	18,488,326	81,998,818	21,987,674	73,745,596	20,577,033	88,038,516	25,478,179

## MARKETS FOR GOATSKINS.

The fact that this country imported goatskins last year to the amount of \$25,000,000 is sufficient evidence that we have a market for any that might be produced, provided the domestic skins were suitable. Of this point there can hardly be a doubt; but it is not probable that those who might engage in the industry here would take the pains necessary to produce the best skins. Those that are imported go principally into the manufacture of shoes, although large quantities are made into gloves and a lesser quantity into morocco leather.

As there has not been a sufficient number of domestic skins placed upon the market to establish a price, the only estimate that can be made must be based upon the imported skins. In making such an estimate it should be remembered that the values of imports is the invoice price at ports of export, and also that the skins are all dry. With these figures as a basis, it will be seen that the skins received in 1902 were worth an average price of 28.9 cents per pound; in 1901 the average price was one cent per pound less. Of course, the weights of the skins vary considerably between the light kid skin and the heavier one of the mature goat. It is a very heavy skin that will weigh 4 pounds when dry. But the value of a properly preserved kid skin is greater per pound than that of an old skin. In estimating an average, one would have to consider these points as well as the supply and demand.

Most of the imported skins arrive in bales of 100 each, and they are all dry. These are sorted into grades by the tanner, and this selection, with his further manipulation, adds to the value.

## THEIR MEAT AND THE MARKETS FOR IT.

While it is generally agreed among those who speak from experience that the kids of all breeds of goats are a delicacy, it is true that among the great mass of the people of this country there is a prejudice against anything bearing the name of "goat." Within the environments of all of the larger cities are found many kids, and it is evident that only a few of them grow to maturity. What becomes of them? Butchers and meat dealers answer the question by saying that they pass over their blocks as "lamb." No meat dealer has heard of a complaint of the quality of such "lamb."

A considerable number of mature common goats are purchased by the packing houses of the larger cities. They are purchased as goats and sold, either in the carcass or canned, as mutton; and many who decry goat meat have unconsciously eaten it many times no doubt. This does not mean that the meat is as palatable as good mutton, but it may be as good as poor mutton, and so the consumer's criticism concerns the quality and not the kind.

The flesh of any mature common goat is not palatable to most persons who have tasted it. This is due to the strong taste and, to some extent, to its toughness. Proper care in dressing would probably mitigate if not entirely prevent the strong taste, and feeding on grain would tend to produce a more tender carcass. Both these points, however, will hardly receive attention from anyone who may contemplate going into the industry, for the reason that they will add materially to the cost of production.

The excellent quality of the kid meat has already been mentioned. It is safe to say that the existing prejudice against it would disappear if people were to test it, and in time a good market ought to be built up for all that can be produced. However, the question arises, Will it pay to raise common goats for the sale of kids? The farmer will have to determine this matter for himself. If a ready market were established for the kids at, say, \$1.50 each, and if one doe can raise three or four kids annually, it can hardly be doubted that the industry could be made profitable. At this time no such market exists.

#### LAND AVAILABLE FOR GOAT RAISING.

In a general way it may be said that all land in the United States, except the very low and swampy tracts, are suitable for goat raising. The feed that goats prefer is browse, with a small admixture of weeds and grass, and therefore those tracts of land that are burdened with brushwood and briars are specially desirable. This fact makes it clear that in the colder parts of the country it would be necessary to provide some feed in winter, as nothing but the soft twigs remain at that time as browse. Goats will eat grass if required to do so and will thrive upon it, but grass land is regarded as being so much more profitable for hay production or as pasture for cattle and sheep that the placing of goats upon it is not to be considered.

There are millions of acres of land suitable for goat raising in the United States. Some of it is Government land open for settlement, and much of it is held by private ownership. The Bureau of Animal Industry makes no pretension toward locating this land for inquirers, but must direct them to other well-known sources of information, such as the various Government land offices, State boards of agriculture, industrial agents of the railroads, real estate agents, etc.

If one selects land for raising goats for their skins in the cold climates, he must remember that he is dealing with short-haired animals, and therefore he must provide a warm shelter for them for winter use. Where the Angora revels in the dry cold of a severe winter, the common short-haired animal would freeze to death.

## AS FOUNDATION STOCK FOR ANGORAS.

A few years ago Mexican does were used extensively as foundation stock for a flock of Angoras, using bucks of the latter breed. However wise the practice may have been at that time, that method of building up a flock of fleece-bearing goats is now in vogue but slightly, if at all. The practice flourished best when the goat raisers knew very little of the larger prices they might have obtained for a better grade of mohair. They were content with prices ranging from 14 to 22 cents per pound. Manufacturers have required better hair than can be produced by grades, and this has tended to reduce very greatly the number of crosses. The profits resulting from such crossing are doubtful. Discussing this point, the writer, in another work, says: "The building up of a flock of Angoras by the practice of crossing upon common does is not so rapid as many suppose. Let it be assumed that we have a flock of 100 common does which drop as many kids the first season. Half of these are bucks, leaving 50 does for the next cross. These 50 drop 50 kids, 25 of which are does; the next cross would give 12 or 13; and the fifth cross 6. This last number represents, approximately, the number of high-grade does that would result each year from the original flock of 100 common does at the beginning."

## CROSSING COMMON GOATS AND ANGORAS.

The employment of common does as foundation stock for a flock of Angoras has already been discussed, and the practice is not encouraged. Considered from the standpoint of meat production, however, the practice merits some favor. While the flesh of the mature common goat is quite inferior, it is well known that that of the Angora is most excellent, and the predominating influence of the Angora blood is so pronounced in crosses that these partake in large degree of the toothsome qualities of the high-grade Angoras.

The question of profit in the production of such crosses for meat will depend upon several conditions which are not easy to find in combination. If it were possible to obtain any considerable number of does easily and cheaply, and if they could be maintained at low cost of feed and care, and, finally, if there could be found a steady market for the produce, the business could be made profitable by good management. The fact that the packing houses buy goats now at a price a few cents per pound lower than they pay for sheep leads to the belief that there would be no difficulty in finding a market for the meat; but it must be remembered, as has been stated elsewhere, that this crossing will ruin the skins for any sort of manufacture except for workmen's gloves and morocco. The packer who buys the goats knows this as well as anyone, and he pays a lower price accordingly. Therefore, in the

matter of crossing to improve the quality of the carcass the salable quality of the skin has been very much impaired.

#### AS DESTROYERS OF BRUSHWOOD.

The pronounced characteristic of Angora goats for destroying brushwood, briars, weeds, etc., has been exploited so extensively that many people have received the impression that this is a characteristic peculiar to the Angora breed. This is not the fact, however, for the predilection of goats for such a diet is common to all breeds alike. Therefore the question that is often submitted to the Bureau of Animal Industry as to whether common goats may be employed for clearing land as successfully as Angoras is answered affirmatively.

It is nearly always the case that land which is brush ridden is rich in quality, and when cleared is most excellent for natural grasses or for tillage. To clear this land by ordinary methods requires an expenditure of money varying from \$5 to \$40 per acre. If goats can do this work just as thoroughly and at no other outlay than their own cost and that of a good fence and a shed, the question arises whether it is not more economical to employ them than to depend upon the laborious process of the grubbing hoe.

#### AS COMPARED WITH ANGORAS.

The thoughtful farmer, however, will survey all sources of income and outgo. He will consider the questions of disposal of the skins and the meat and of the animals themselves if he should produce a surplus or have no further need of them. These matters are discussed under other heads, but a little investigation will no doubt soon convince the farmer that the common goat is not so promising of profit as the Angora breed. The latter goat produces a fleece for which there is good demand at good prices, while the common goat contributes nothing of this kind. The Angora's flesh at all ages is nutritious and more palatable than that of the common breed; it is less inclined to jump or climb; there is an entire absence of the ill odor characteristic of bucks of the common breed except during the rutting season; the value of the skins can not be compared, owing to an unsteady market for the Angora skins and the entire absence of prices for the very few domestic skins of the common goat that find their way to market. The manurial value is the same for both breeds. The Angora usually has but one kid a year, but there are occasional flocks where there are many pairs of twins. On the other hand the rule among common goats is twins twice a year, and often triplets are dropped.

In addition to these facts there is profit in keeping Angoras for mohair production even after they may have served their purpose in clearing up land for cultivation. The keeping of common goats after

this work is done is dependent upon the value of their skins and meat. At this time there is a ready sale for Angoras, while it can not be said that there is a market for the common breed, and one can hardly be developed if there is no profit in raising them for their skins.

#### AS MILK PRODUCERS.

The number of goats kept in the United States for milk production is known to be very small; it is also known that these are principally of the common breed, although there are occasional individuals among the Angoras that are excellent milkers.

A public-spirited gentleman of New Jersey has for many years been endeavoring to convert the common goat into a clean, healthful, hardy milch goat, and he has had pretty fair success. A good milch goat is one that will give at least two quarts of milk per day and have a period of lactation of four to six months. Very few of the common goats of this country will do so well as that. If there are any that reach this standard they ought to be used as foundation stock for an American breed of milch goats.

The quality of the milk from the common goat is said to be as good as that from any other; and the healthfulness of goats' milk is everywhere acknowledged and recommended by those who have investigated the matter.

#### TARIFF RATES.

Goatskins are admitted free of duty, presumably owing to the great demand in this country, and to the fact that they do not come into competition with a domestic industry.

The animals themselves are admitted free of duty, if imported for breeding purposes, upon condition that they are registered by a society recognized by the Government; but there are very few registered goats, other than Angoras, in the world; probably all are confined to England at this time, and so imported goats will be subject to the tariff rate of 20 per cent ad valorem. This fact will probably be of interest only to those who may contemplate importations of common goats from Mexico.

#### THE QUESTION OF PROFITS.

The purpose in this circular is to give the conditions as accurately as possible and in a simple and complete form so far as they relate to the question of raising common goats in the United States. It is assumed that no one would engage in this or any other enterprise without informing himself as to the conditions that he is likely to deal with in the venture; therefore the facts are given as they appear to the writer, and these ought to enable anyone to determine for himself whether or not it will be profitable to engage in the raising of goats.

He will have to take into consideration a score of items of varying importance, such as cost of land, cost of labor, cost and extent of equipment, and cost of the goats, the supply of these animals from which to select his stock, and also the markets for the skins and meat.

The information of the Bureau of Animal Industry is that very few attempts have been made in this country to raise goats for their skins, and of these one only was upon a scale of commercial importance. In this case a company had an abundance of capital, good management, a ranch of cheap land but with an abundance of feed, and employed labor as cheaply as such labor could be had, yet the venture was declared a failure. It should be stated also that this company did its own tanning and manufactured the product into shoes, thus saving to itself what would otherwise become middlemen's profits. The best net income that the company could realize for skin, carcass, and tallow was 80 cents per head.

The cost of carrying on the raising of these goats is the great drawback to the development of the industry here. A study of the table of imports shows that most of the goatskins come from countries where the cost of production is almost nothing. Similar conditions, except possibly as to the cheapness of land, do not exist in any part of our country.

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